The reason that the availability of book cost data is irrelevant is that book cost data generally is in Part 32 format. This format does not provide equipment-specific detail or unit investments, that are the primary drivers of an engineering design based proxy model. Additionally, book cost data does not differentiate between the capitalized cost of installing plant and the plant itself. Another aspect of book cost data is that it is maintained on a study area basis. The installation and plant costs that are due to terrain characteristics in one geographic area, such as a subdivision in mountain areas, are indistinguishable from the installation and plant costs of subdivisions that exist in the plains. Therefore, book cost data cannot provide area specific costs below the study area level. In sum, book cost data does not provide service specific engineering costs or equipment costs necessary for a proper proxy model to function.

The question would be whether data for the relevant inputs was publicly available. Indeed, those publicly available data sources are contained in BCM2. Parties must only agree to the terms of the license agreement to utilize the BCM2. All the more reason that a closely-held "proprietary input" type model should be resoundingly rejected.

48. Should the materiality and potential importance of proprietary information be considered in evaluating the various models?

No. BCM2 and any other proxy models used for the purpose of crafting a regulatory-created billion dollar fund, the purpose of which is to promote a broadly-endorsed societal goal such as universal service, must be public. Proprietary models and information may be used to validate publicly available proxy models and their inputs. However, proprietary models should not be used to develop high-cost fund support.

Such models are in sharp contrast to internal corporate cost studies conducted for the purpose of pricing a companies own telecommunications services. These latter studies are expected to, and usually do, contain proprietary corporate and market data. Appropriate protections are necessary with respect to the introduction and use of such cost studies, not only to protect the proprietary information of the company creating the cost study, but also other third parties (such as vendors), as well.

Competitive Bidding

49. How would high-cost payments be determined under a system of competitive bidding in areas with no competition?

50. How should a bidding system be structured in order to provide incentives for carriers to compete to submit the low bid for universal service support?

51. What, if any, safeguards should be adopted to ensure that large companies do not bid excessively low to drive out competition?

52. What safeguards should be adopted to ensure adequate quality of service under a system of competitive bidding?

53. How is collusion avoided when using a competitive bid?

54. Should the structure of the auction differ if there are few bidders? If so, how?

55. How should the Commission determine the size of the areas within which eligible carriers bid for universal service support? What is the optimal basis for determining the size of those areas, in order to avoid unfair advantage for either the incumbent local exchange carriers or competitive carriers?

U S WEST has but a limited response to questions 49-55, at this time. We appreciate that certain LECs have endorsed the notion of competitive bidding and we believe it worthy of consideration. However, while the concept has some merit, there appear to be conflicts between it and the requirement of the 1996 Act for multiple eligible carriers. Furthermore, the concept of competitive bidding suggests substantial regulatory and administrative involvement in a matter that, at least for the time being, U S WEST believes is more simply and straightforwardly addressed by allowing for multiple service providers. We look forward to reviewing the answers to these questions as we continue to increase our understanding of this issue.

Benchmark Cost Model (BCM)

56. How do the book costs of incumbent local exchange carriers compare with the calculated proxy costs of the Benchmark Cost Model (BCM) for the same areas?

U S WEST does not know how the book costs of incumbent LECs compare with the calculated costs of the BCM. Nor do we consider such information relevant to an analysis of the validity or appropriateness of proceeding with a determination of high-cost funding using the BCM or the BCM2. Since this question directly addresses the original BCM, our response will reply first with respect to the original

BCM and afterward discuss its applicability to BCM2. The BCM was not designed to provide the book costs of incumbent LECs, which are typically based on traditional study areas, rather than CBGs. Comparing the BCM results to book costs is an apples and oranges comparison. There are 3 major reasons that this comparison is invalid.

- First, the purpose of the BCM was to identify high-cost CBGs where subsidies may be needed to provide basic telephone service. In order to perform this task, the BCM inputted very detailed geographic information and then applied high-level engineering designs of the major cost components of basic service. The model included only the network elements that served to distinguish high-cost from low-cost areas. This approach kept the complexity of the model to a manageable level, while allowing use of the most important cost drivers. Therefore, the BCM did not include all the cost elements that are included in an incumbent carrier's book costs.

- Second, the cost estimates generated by the BCM for each CBG represented a hypothetical cost of placing new loop plant from currently existing central office locations using today's technology and publicly-available investment information. Every United States household reflected in the 1990 Census was assumed to be connected to the network in the same time frame and in a uniform manner. The BCM utilized loop and switching technology types currently available for deployment. The BCM created a highly efficient investment level because all cable routes utilized the optimum cable sizes to serve the households that existed in 1990 (plus a typical engineering planning horizon).

  As stated above, the investment level in the BCM assumed the plant was placed at a single point in time, unlike actual book investment which reflects additional investments made over time to reinforce loop feeder routes as well as additional distribution plant investments to accommodate growth. Therefore, BCM calculated a current cost, using current technology, while book costs represent investments made over many years using different vintages of technology.

- The third difference is that the BCM represented the investments for only a single line to each household, while book costs include investments to serve both business as well as residential customers. For the above reasons, no valid conclusions may be drawn from such comparisons

BCM2 on the other hand, includes all basic local service costs for both business and residence customers. However, like BCM, its costs represent current technology and infrastructure costs based upon deploying service to all customers at a single point in time. Therefore, comparisons between BCM2 and book costs are not legitimate comparisons. The costs are calculated for different purposes and

those differing purposes drive those costs deemed relevant to the exercise in question.

57. Should the BCM be modified to include non-wireline services? If wireless technology proves less costly than wireline facilities, should projected costs be capped at the level predicted for use of wireless technology?

BCM2 recognizes that some customers may more reasonably be served by emerging wireless loop technologies. Thus, the BCM2 establishes a maximum investment per wireline loop.

A number of factors should be considered when including wireless technology into a high-cost targeting model. For example, the wireless technology should be commercially available to any basic local service provider. Spectrum to use the technology should also be available for use by any basic local service provider. (This availability may be through primary spectrum licenses or through the resale or lease of spectrum.) Finally the basic local service offered must be equivalent to landline service in terms of quality, transmission parameters, calling scope, and price.

58. What are the advantages and disadvantages of using a wire center instead of a Census Block Group as the appropriate geographic area in projecting costs?

In U S WEST's opinion, targeting high-cost funding to wire centers has more disadvantages than advantages. The advantages of such targeting are not grounded in sound economics. And, the purported advantages themselves might not hold up to rigorous analysis. The first alleged advantage of wire center targeting is that it would be easier to administer from a regulatory standpoint. The second is that -- at least at first blush -- it might allow for a lower-sized fund than targeting at the CBG level. However, that lower fund size can only be maintained on the backs of high-cost customers who might never actually see any high-cost fund support.

The disadvantages of targeting to the wire center goes beyond regulatory efficiency or fund sizing. They go to the core of the matter of creating a competitive local service market. Wire center targeting is simply not as precise a high-cost targeting tool as CBGs. To utilize wire centers for targeting, rather than CBGs, would be to consciously choose the grosser of the targeting tools rather than the more precise. Furthermore, wire center targeting is at odds with the efficient evolution of bona fide local competition. Carriers should receive high-cost funding

when they serve customers who are high-cost to serve. They should not receive funding when they are, in fact, serving customers who are low-cost to serve.

No matter what the average cost within a wire center, there will always be low-cost customers close to the wire center and higher-cost customers the farther away you get from that wire center. If a wire center qualifies for funding based upon its average cost, and a new entrant chooses only to serve lower-cost customers in town, then that new entrant receives a windfall and the high-cost, away-from-wire-center customer gets inadequate support leading to inadequate service. Indeed, every dollar a new entrant gets for serving a customer whose cost is below the funding benchmark in reality should be going to another customer whose cost is above the benchmark. Thus, the lower apparent fund size created through wire center "targeting" is illusory. It is a fund size made smaller only because funding is not reaching the universe of customers actually in need of the funding -- a situation that will have to be addressed somewhere, sometime (long after the windfall has been spent).

59. The Maine PUC and several other State commissions proposed inclusion in the BCM of the costs of connecting exchanges to the public switched network through the use of microwave, trunk, or satellite technologies. Those commenters also proposed the use an additional extra-high-cost variable for remote areas not accessible by road. What is the feasibility and the advisability of incorporating these changes into the BCM?

Interoffice costs were not included in the BCM. The BCM2 does recognize certain interoffice costs associated with the provision of basic local service. However, the extraordinary interoffice costs described by the Maine Public Utilities Commission would not be captured in BCM2 because they are associated with toll service. Since interoffice facilities associated with toll service are not included in U S WEST's definition of universal service, it is not appropriate to include those costs in BCM2. To the extent a carrier has high toll interoffice costs it is more appropriate that they be recovered via toll and/or access charges.

In order for a national model to capture such costs it would have to include the complex interactions of the interoffice network and the geographic and terrain characteristics of all states. This model would be complex in that it would need to engineer the interoffice facilities over long distances and around geographic obstacles. Therefore, the modeling effort would require a great deal of resources to determine a relatively small portion of cost.

BCM2 includes a number of terrain variables that impact the determination of cost. Areas that do not have road access certainly provide unique problems in the provision of basic local service. It is unclear whether the unique circumstances associated with each of these remote areas could adequately be addressed by the

inclusion of an additional extra-high-cost variable. Problems in these areas could include the absence of electrical power, which make it difficult to provide any technology that can provide adequate basic service as it is commonly understood.

60. The National Cable Television Association proposed a number of modifications to the BCM related to switching cost, fill factors, digital loop carrier subscriber equipment, penetration assumptions, deployment of fiber versus copper technology assumptions, and service area interface costs. Which, if any, of these changes would be feasible and advisable to incorporate into the BCM?

The BCM2 now includes a number of inputs proposed by the National Cable Television Association ("NCTA"). These include business lines, multiple breakpoints for the deployment of fiber versus copper technology, the recognition of multiple switch sizes, and a more accurate modeling of the structure and costs of the local telephone network. However, a number of NCTA's proposed modifications are not designed to assure greater accuracy of the BCM or to produce a more accurate reflection of the costs of universal service. Rather, they are purely designed to lower the "price tag" associated with universal service funding. Such proposed changes, which include proposals to modify the network fill factors to 95%, to remove all fixed costs associated with central office switches, and to unreasonably lower digital loop carrier costs were rejected. These proposals have no economic or engineering justifications. As such, they are inappropriate modifications.

61. Should the support calculated using the Benchmark Cost Model also reflect subscriber income levels, as suggested by the Puerto Rico Telephone Company in its comments?

In U S WEST's opinion, subscriber income levels are best addressed through Lifeline and Link-Up type programs. The BCM (and the BCM2) were designed to identify those geographic areas where customers who are high-cost to serve are located and concentrated. This "high-cost identification" stems from the costs encountered by providers of local service as compared to the regulated price for the service, not the income of the subscribers. In areas where the regulated price does not recover the costs associated with the service, high-cost support is necessary to ensure continued availability of local phone service.

62. The BCM appears to compare unseparated costs, calculated using a proxy methodology, with a nationwide local benchmark rate. Does use of the BCM suggest that the costs calculated by the model would be recovered only through services included in the benchmark rate? Does the BCM

require changes to existing separations and access charge rules? Is the model designed to change as those rules are changed? Does the comparison of model costs with a local rate affordability benchmark create an opportunity for over-recovery from universal service support mechanisms?

The 1996 Act confirms the significant federal interest in the continued availability of affordable telephone service. U S WEST has proposed that the BCM2 be used to identify geographic areas where the costs of providing local service exceed a FFB of $30. Such costs would be recovered through a federal high-cost fund.

Separations rules would need to be changed to reflect additional allocations of costs (costs in excess of $30 identified by the BCM2) to the interstate jurisdiction. These excess costs would be classified as interstate costs (much like the current universal service rules identify additional intrastate costs that are then allocated to the interstate jurisdiction to be recovered through an interstate fund) and recovered through the interstate high-cost fund. To avoid an over-recovery of total costs, there would be an equivalent reduction in the intrastate revenue requirement or intrastate revenues that currently provide support for basic local service.

63. Is it feasible and/or advisable to integrate the grid cell structure used in the Cost Proxy Model (CPM) proposed by Pacific Telesis into the BCM for identifying terrain and population in areas where population density is low?

The BCM2 has the capability to allow the use of any small geographic area as an input. A balance needs to be struck between the cost, complexity, and accuracy of small area data. In changing geographic data areas, it is also important to pay attention to the availability of census block data and CBG data, as well as grid data to determine which provides the greatest cost/benefit ratio and the appropriate level of granularity in identifying areas where basic local service costs exceed the affordability benchmark. An industry group is currently experimenting with the use of grid and block data to determine which produces the most accurate results.

Cost Proxy Model Proposed by Pacific Telesis

64. Can the grid cell structure used in the CPM reasonably identify population distribution in sparsely-populated areas?

The grid cell structure used in the CPM holds promise. But, as yet, it has not been thoroughly examined by other parties. There are a number of issues to be considered in the development of grid cell data, since census bureau data for households is allocated in the process of creating grid cells. Additionally, the size of

the grid cells needs to be evaluated in relationship to its purpose of determining customer locations in sparsely populated areas. Certain questions come almost immediately to mind: Do the sizes of the grid cells need to be as small as they are, in light of the fact that the small size of the grid cells substantially increases the number of data items that must be processed by the model? Are there other geographic units, such as the census block, that might be a more appropriate level of geography to analyze in terms of rural cost?

65. Can the CPM be modified to identify terrain and soil type by grid cell?

Further investigation is necessary before this question can be answered in any meaningful way

66. Can the CPM be used on a nationwide basis to estimate the cost of providing basic residential service?

The CPM would need to be embellished by adding substantial amounts of information from every existing LEC in the country to be able to model the costs of providing residential service across the United States.

67. Using the CPM, what costs would be calculated by Census Block Group and by wire center for serving a rural, high-cost state (e.g., Arkansas)?

To U S WEST's knowledge, the CPM has data for only a few states. At this date, we are not sure what those states are beyond California and Georgia.

68. Is the CPM a self-contained model, or does it rely on other models, and if so, to what extent?

It is a self-contained model.

SLC/CCLC

69. If a portion of the CCL charge represents a subsidy to support universal service, what is the total amount of the subsidy? Please provide supporting evidence to substantiate such estimates. Supporting evidence should indicate the cost methodology used to estimate the magnitude of the subsidy (e.g., long-run incremental, short-run incremental, fully-distributed).

The subsidy nature of the CCL derives primarily from the manner in which it is charged. Twenty-five percent of the cost of the local loop is assigned to the interstate jurisdiction as the common line revenue requirement. The CCL is the residual (if any) of this revenue requirement after the application of the EUCL charge (currently capped at $3.50/mo. for residential customers and single-line business and $6/mo. for multi-line business). While individual line costs vary widely from customer to customer, the CCL is calculated at the study area level.

The problem with the CCL charge in a competitive environment stems not from its level, but rather its application. While the loop cost is fixed, the CCL is assessed on a minutes-of-use ("MOU") basis. A high user of interstate toll service pays significantly more loop costs through the CCL than does a low user or a non-user. In this case, however, the subsidy flows from the high-use customer to the low-use customer.

Because local competition makes the high-use customer susceptible to pursuit of competitive alternatives, many parties, including U S WEST, have suggested that more of the interstate recovery of common line costs be shifted from the MOU-rated CCL to the flat-rated EUCL. If, in the interim, the Commission determines interstate telecommunications services should cover a portion of local loop costs through a CCL, the current MOU charge should be replaced by a bulk-billed flat rate charge. In fact, U S WEST has filed for a waiver to bulk bill the CCL on an interim basis.[12]

70. If a portion of the CCL charge represents a contribution to the recovery of loop costs, please identify and discuss alternatives to the CCL charge for recovery of those costs from all interstate telecommunications service providers (e.g., bulk billing, flat rate/per-line charge).

Because the CCL charge primarily represents the recovery of loop costs, the appropriate recovery should be through an increase in the EUCL charges. If loop costs are to continue to be borne by providers of interstate telecommunications service, the current per MOU charge should be replaced with a flat-rate, bulk-bill charge assessed to interstate toll providers based on their share of interstate MOU.

The flat-rate, bulk-bill approach is only appropriate as an interim solution, however. It should be replaced once the Commission and state commissions complete a more comprehensive review of the subsidies necessary to support universal service and determine new mechanisms for collecting such subsidies.

[12] See U S WEST Petition for Waiver, filed July 24, 1996.

Low-Income Consumers

71. Should the new universal service fund provide support for the Lifeline and Linkup programs, in order to make those subsidies technologically and competitively neutral? If so, should the amount of the lifeline subsidy still be tied, as it is now, to the amount of the subscriber line charge?

U S WEST supports these initiatives. However, we believe that it would be appropriate for the Commission to reexamine the caps placed on these programs as rates are rebalanced.

Administration of Universal Service Support

72. Section 254(d) of the 1996 Act provides that the Commission may exempt carriers from contributing to the support of universal service if their contribution would be "de minimis." The conference report indicates that "[t]he conferees intend that this authority would only be used in cases where the administrative cost of collecting contributions from a carrier or carriers would exceed the contribution that carrier would otherwise have to make under the formula for contributions selected by the Commission." What levels of administrative costs should be expected per carrier under the various methods that have been proposed for funding (e.g., gross revenues, revenues net of payments to other carriers, retail revenues, etc.)?

U S WEST cannot, at this time, envision how a carrier would be able to make a case for de minimis status because we cannot perceive how the "administrative cost of collecting contributions from a carrier . . . would exceed the contribution that carrier would otherwise have to make under the formula for contributions selected by the Commission." All carriers should have the mechanism in place for the collection and remittance of taxes. Thus, imposing a universal service fund

collection requirement on carriers should not place an unreasonable burden on any of them.

Respectfully submitted,

U S WEST, INC.

By: Coleen M. Egan-Helmreich

Kathryn Marie Krause
Coleen M. Egan-Helmreich
Suite 700
1020 19th Street, N.W.
Washington, DC 20036
(303) 672-2859

Its Attorneys

Of Counsel,
Dan L. Poole

August 2, 1996

CERTIFICATE OF SERVICE

I, Rebecca Ward, do hereby certify that on this 2nd day of August, 1996, I have caused a copy of the foregoing **RESPONSES OF U S WEST, INC.** to be served via first-class United States Mail, postage prepaid, upon the persons listed on the attached service list.

Rebecca Ward

***Via Hand-Delivery**

(CC9645C.COS/KK/lh)

*James H. Quello
Federal Communications Commission
Room 802
1919 M Street, N.W.
Washington, DC 20554

*Reed E. Hundt
Federal Communications Commission
Room 814
1919 M Street, N.W.
Washington, DC 20554

*Susan P. Ness
Federal Communications Commission
Room 832
1919 M Street, N.W.
Washington, DC 20554

*Rachelle B. Chong
Federal Communications Commission
Room 844
1919 M Street, N.W.
Washington, DC 20554

*Regina M. Keeney
Federal Communications Commission
Room 500
1919 M Street, N.W.
Washington, DC 20554

*Kenneth P. Moran
Federal Communications Commission
Room 812
2000 L Street, N.W.
Washington, DC 20554

*Irene Flannery
Federal Communications Commission
Room 6325
2025 M Street, N.W.
Washington, DC 20554

*Ernestine Creech
Federal Communications Commission
Room 257
2000 L Street, N.W.
Washington, DC 20554

(Include 3.5 Diskette Copy w/Cover Ltr.)

*Deborah Dupont
Federal Communications Commission
Room 257
2000 L Street, N.W.
Washington, DC 20554

*Bill Kehoe
Federal Communications Commission
Room 257
2000 L Street, N.W.
Washington, DC 20554

*Gary Oddi
Federal Communications Commission
Room 257
2000 L Street, N.W.
Washington, DC 20554

*Clara Kuehn
Federal Communications Commission
Suite 257
2000 L Street, N.W.
Washington, DC 20554

*Rafi Mohammed
Federal Communications Commission
Room 812
2000 L Street, N.W.
Washington, DC 20554

*Andrew Mulitz
Federal Communications Commission
Suite 257
2000 L Street, N.W.
Washington, DC 20554

*William Howden
Federal Communications Commission
Suite 812
2000 L Street, N.W.
Washington, DC 20554

*Jonathan Reel
Federal Communications Commission
Suite 257
2000 L Street, N.W.
Washington, DC 20554

*Pamela Szymczak
Federal Communications Commission
Room 257
2000 L Street, N.W.
Washington, DC 20554

*Alex Belinfante
Federal Communications Commission
Room 502-A
2033 M Street, N.W.
Washington, DC 20554

*Jeanine Poltronieri
Federal Communications Commission
Suite 257
2000 L Street, N.W.
Washington, DC 20554

*Gary Seigel
Federal Communications Commission
Suite 812
2000 L Street, N.W.
Washington, DC 20036

*Whiting Thayer
Federal Communications Commission
Room 812
2000 L Street, N.W.
Washington, DC 20554

*Mark Nadel
Federal Communications Commission
Room 542
1919 M Street, N.W.
Washington, DC 20554

*Larry Povich
Federal Communications Commission
Room 542
1919 M Street, N.W.
Washington, DC 20554

*International Transcription
Services, Inc.
Suite 140
2100 M Street, N.W.
Washington, DC 20037

Kenneth McClure
Missouri Public Service Commission
Suite 530
310 West High Street
Jefferson City, MO 65102

Julia Johnson
Florida Public Service Commission
Capital Circle Office Center
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Sharon L. Nelson
Washington Utilities and Transportation
Commission
POB 47250
Olympia, WA 98504-7250

Laska Schoenfelder
South Dakota Public Utilities Commission
500 East Capital Avenue
Pierre, SD 57501

Martha S. Hogerty
Public Counsel for the State
of Missouri
Room 250
Harry S. Truman Building
POB 7800
Jefferson City, MO 65102

Paul E. Pederson
Missouri Public Service Commission
Truman State Office Building
POB 360
Jefferson City, MO 65102

Eileen Benner
Idaho Public Utilities Commission
POB 83720
Boise, ID 83720-0074

Charles Bolle
South Dakota Public Utilities Commission
State Capital
500 East Capital Avenue
Pierre, SD 57501-5070

Lorraine Kenyon
Alaska Public Utilities Commission
Suite 400
1016 West 6th Avenue
Anchorage, AK 99501

Debra M. Kriete
Pennsylvania Public Utilities Commission
POB 3265
Harrisburg, PA 17105-3265

Mark Long
Florida Public Service Commission
Gerald Gunter Building
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Samuel Loudenslager
Arkansas Public Service Commission
POB 400
Little Rock, AR 72203-0400

Sandra Makeeff
Iowa Utilities Board
Lucas State Office Building
Des Moines, IA 50319

Philip F. McClelland
Pennsylvania Office of Consumer Advocate
1425 Strawberry Square
Harrisburg, PA 17120

Michael A. McRae
D.C. Office of the People's Counsel
Suite 500
1133 15th Street, N.W.
Washington, DC 20005

Terry Monroe
New York Public Service Commission
Three Empire Plaza
Albany, NY 12223

Teresa Pitts
Washington Utilities and Transportation Commission
POB 47250
Olympia, WA 98504-7250

James Bradford Ramsay
National Association of Regulatory Utility Commissioners
1201 Constitution Avenue, N.W.
Washington, DC 20423

Brian Roberts
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298

Deborah S. Waldbaum
Colorado Office of Consumer Counsel
Suite 610
1580 Logan Street
Denver, CO 80203

(CC9645C.KK/lh)
Last Update: 8/1/96